

Application No.: 09/824,647

Docket No.: A7542.0000/P001-E

Current Claims

Claims 1-5 (cancelled).

Claims 14-16 (cancelled).

Claim 19 (cancelled).

Claims 24-26 (cancelled).

28. (New) A composition comprising an isolated antibody capable of binding to an epitope of the protein encoded by SEQ ID NO: 16, wherein said antibody has anti-tumorigenic activity.

29. (New) A composition according to claim 28, wherein said antibody inhibits the growth of tumorigenic cells by at least about 50%.

30. (New) A composition according to claim 28, wherein said epitope comprises an amino acid sequence selected from the group consisting of SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, and SEQ ID NO: 7.

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31. (New) A composition according to claim 28, wherein said antibody is selected from a group consisting of anti-K19T, anti-S14R, anti-E19V, and anti-A14R antibodies.

32. (New) A composition according to claim 28, wherein said antibody is produced in an animal immunized with a material comprising SEQ ID NO: 3.

33. (New) A composition according to claim 28, wherein said antibody is produced in an animal immunized with a material comprising SEQ ID NO: 4.

34. (New) A composition according to claim 28, wherein said antibody is produced in an animal immunized with a material comprising SEQ ID NO: 5.

45. (New) The composition of claim 43, wherein said cytotoxic molecule is an oncoxin.

46. (New) A composition comprising a monoclonal antibody capable of binding to an epitope of the protein encoded by SEQ ID NO: 16, wherein said monoclonal antibody has anti-tumorigenic activity.

47. (New) A composition according to claim 46, wherein said antibody inhibits the growth of tumorigenic cells by at least about 50%.

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48. (New) A composition according to claim 46, wherein said epitope comprises an amino acid sequence selected from the group consisting of SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, and SEQ ID NO: 7.

49. (New) A composition according to claim 46, wherein said antibody is selected from a group consisting of anti-K19T, anti-S14R, anti-E19V, and anti-A14R antibodies.

50. (New) A method of making an antibody, comprising immunizing an animal with a protein encoded by at least a portion of SEQ ID NO: 16, and producing said antibody in said animal, wherein said antibody has anti-tumorigenic activity.

51. (New) A method of making the antibody of claim 50, wherein said protein comprises SEQ ID NO: 3.

52. (New) A method of making the antibody of claim 50, wherein said protein comprises SEQ ID NO: 4.

53. (New) A method of making the antibody of claim 50, wherein said protein comprises SEQ ID NO: 5.

54. (New) A method of making the antibody of claim 50, wherein said protein comprises SEQ ID NO: 6.

35. (New) A composition according to claim 28, wherein said antibody is produced in an animal immunized with a material comprising SEQ ID NO: 6.

36. (New) A composition according to claim 28, wherein said antibody is produced in an animal immunized with a material comprising SEQ ID NO: 7.

37. (New) A composition according to claim 28, wherein said antibody is produced in an animal immunized with a material comprising SEQ ID NO: 16.

38. (New) The composition of claim 28, wherein said antibody is a chimeric antibody comprising a plurality of portions, wherein at least one portion is derived from a human.

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39. (New) The composition of claim 38, wherein at least one portion is derived from a non-human animal.

40. (New) The composition of claim 39, wherein said non-human animal is a mouse.

41. (New) The composition of claim 38, wherein said at least one portion is a constant region.

42. (New) The composition of claim 38, wherein said at least one portion is a variable region.

43. (New) The composition of claim 28, further comprising a cytotoxic molecule, wherein said antibody is attached to said cytotoxic molecule.

44. (New) The composition of claim 43, wherein said cytotoxic molecule is selected from the group consisting of toxins, oncotoxins, mitotoxins, immunotoxins, and antisense oligonucleotides.

55. (New) A method of making the antibody of claim 50, wherein said protein comprises SEQ ID NO: 7.

56. (New) A method of inhibiting tumorigenic activity, comprising obtaining an antibody capable of binding to an epitope of the protein encoded by SEQ ID NO: 16, wherein said antibody inhibits tumorigenic activity; and contacting said antibody with the protein encoded by SEQ ID NO: 16.

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57. (New) A method according to claim 56, wherein said antibody is selected from the group consisting of anti-K19T, anti-S14R, anti-E19V, and anti-A14R antibodies.

58. (New) A method according to claim 56, wherein said epitope comprises an amino acid sequence selected from the group consisting of SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, and SEQ ID NO: 7.

59. (New) A method according to claim 56, wherein said antibody is isolated from an animal immunized with a material comprising SEQ ID NO: 3.

60. (New) A method according to claim 56, wherein said antibody is isolated from an animal immunized with a material comprising SEQ ID NO: 4.

61. (New) A method according to claim 56, wherein said antibody is isolated from an animal immunized with a material comprising SEQ ID NO: 5.

62. (New) A method according to claim 56, wherein said antibody is isolated from an animal immunized with a material comprising SEQ ID NO: 6.

63. (New) A method according to claim 56, wherein said antibody is isolated from an animal immunized with a material comprising SEQ ID NO: 7.

64. (New) A method according to claim 56, wherein said antibody is isolated from an animal immunized with a material comprising SEQ ID NO: 16.

65. (New) A method of inhibiting tumor cell proliferation, comprising administering to a tumor cell an effective amount of an antibody capable of binding to an epitope encoded by SEQ ID NO: 16, wherein said antibody inhibits tumor cell proliferation.

66. (New) A method according to claim 65, wherein said tumor cell is selected from the group consisting of breast, ovarian, adipose, brain, liver, and kidney cells.

67. (New) A method according to claim 65, wherein said antibody inhibits tumor cell proliferation by at least about 50%.

68. (New) A method according to claim 65, wherein said antibody is selected from the group consisting of anti-K19T, anti-S14R, anti-E19V and anti-A14R antibodies.

69. (New) A method according to claim 65, wherein said epitope comprises an amino acid sequence selected from the group consisting of SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, and SEQ ID NO: 7.

70. (New) A method according to claim 65, wherein said antibody is produced in an animal immunized with a material comprising SEQ ID NO: 3.

71. (New) A method according to claim 65, wherein said antibody is produced in an animal immunized with a material comprising SEQ ID NO: 4.

72. (New) A method according to claim 65, wherein said antibody is produced in an animal immunized with a material comprising SEQ ID NO: 5.

73. (New) A method according to claim 65, wherein said antibody is produced in an animal immunized with a material comprising SEQ ID NO: 6.

74. (New) A method according to claim 65, wherein said antibody is produced in an animal immunized with a material comprising SEQ ID NO: 7.

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75. (New) A method according to claim 65, wherein said antibody is produced in an animal immunized with a material comprising SEQ ID NO: 16.